

REMARKS/ARGUMENTS

Claims 2-27 are active.

Claims 18-25 are withdrawn based on the imposed restriction. Nonetheless, these non-elected claims are retained and amended to depend from the elected subject matter of Claim 2 so that the Office may consider rejoinder upon determining that the elected product claims are allowable. With respect to the species election, Applicants reiterate their request to expand to the non-elected species upon finding that the elected specie is allowable.

Claim 2 is amended in accordance with the disclosure for the variable R⁶ found on page 19, line 19 to page 22, line 15 of the specification. The remaining claims have been amended consistent with the amendments to Claim 2, from which these claims depend.

Claims 7 and 12 have been cancelled thereby addressing the objection noted at pages 4-5 of the Action.

No new matter is added.

The rejection under 35 USC 112, first paragraph is addressed by (A) deletion of “phenyl substituted by carboxy” and for pointing out that Claim 27 is supported by original Claim 16 (not Claim 6 as incorrectly noted in the last amendment). Further support is found on pages 33-53 of the specification as originally filed. Withdrawal of the rejection is requested.

The rejection of Claim 9 under 35 USC 112, second paragraph is addressed by changing its dependency to pending Claim 2. Withdrawal of the rejection is requested.

In the Official Action, the Examiner has maintained the anticipation rejection citing JP 2002/53566 to Inaba but now cites two new compounds (see page 12) and 17 additional

compounds identified from the CAS database. In view of the amendments submitted to the claims, the rejections are no longer applicable. Specifically for each of the citations:

- (a) Inaba's compounds 154 and 155 at the corresponding R⁶ position includes an acyl group C(O)R where R is a C₃-C₈-cycloalkyl. As acyl is not a substituent in Claim 2, these compounds are not within the scope of the claims. Also C1-6 alkyl C3-8 cycloalkyl substituted by oxy as interpreted by the Examiner is not within the substituents listed in the claims.
- (b) This compound includes H at the R⁴ position and 2-methoxy phenyl at the R⁶ position, the later substituent is excluded from the definition of R⁶ in the claims.
- (c) This compound includes an acetyl phenyl at the R⁶ position but it also requires a phenyl at the R⁴ position, a substituent not permitted in the claims. Therefore, this compound is not relevant.
- (d) This compound includes a dimethyl amino phenyl at the R⁶ position, a substituent is excluded from the definition of R⁶ in the claims.
- (e) This compound includes a phenyl substituted with carboxy at the R⁶ position, a substituent is excluded from the definition of R⁶ in the claims.
- (f) This compound includes an acetyl phenyl at the R⁶ position, a substituent is excluded from the definition of R⁶ in the claims.
- (g) This compound includes a hydroxyphenyl at the R⁶ position, a substituent is excluded from the definition of R⁶ in the claims.
- (h) This compound includes an acetylamino phenyl at the R⁶ position, a substituent is excluded from the definition of R⁶ in the claims.
- (i) This compound includes an aminophenyl at the R⁶ position, a substituent is excluded from the definition of R⁶ in the claims.

- (j) This compound includes a phenyl substituted by carboxy at the R⁶ position, a substituent is excluded from the definition of R⁶ in the claims.
- (k) This compound includes a benzyl sulfonamide at the R⁶ position which Applicants believe the Examiner interprets as the aryl amino sulfonyl listed in Claim 2, a substituent is excluded from the definition of R⁶ in the claims.
- (l) This compound includes a phenyl substituted with a carboxyl group at the R⁶ position, one that I do not see in the list provide in Claim 2, a substituent is excluded from the definition of R⁶ in the claims.
- (m) This compound includes a phenyl substituted by carboxy at the R⁶ position.
- (n) This compound includes a benzyl sulfonamide at the R⁶ position which Applicants believe the Examiner interprets as the aryl amino sulfonyl listed in Claim 2, a substituent is excluded from the definition of R⁶ in the claims.
- (o) This compound includes a chloro phenyl at the R⁶ position, a substituent is excluded from the definition of R⁶ in the claims.
- (p) This compound includes an acetyl amino phenyl at the R⁶ position, a substituent is excluded from the definition of R⁶ in the claims.
- (q) This compound includes a bromophenyl at the R⁶ position, a substituent is excluded from the definition of R⁶ in the claims.
- (r) This compound includes a methyl phenyl at the R⁶ position, a substituent is excluded from the definition of R⁶ in the claims.

Regarding the obviousness rejection, the United States Court of Appeals for the Federal Circuit has articulated a 3 element test for a *prima facie* case of obviousness based on structural similarity of a lead compound to a claimed compound. First, there must be a preliminary finding that one of ordinary skill...would have selected [the prior art compound] as a lead compound. There is no evidence that one would have done so. Second, a person of

ordinary skill must have reason to attempt to make the claimed compound by modifying the lead compound. As the claimed compounds are targeted as PI3 kinase inhibitors, one would not have anticipated this activity simply based on the structure in the cited documents so there is no reason to modify the lead compound. Indeed, there is no evidence that adding a substituent that would be required to alter each of the generic compounds is routine. Third, there must be a reasonable expectation of success in making the claimed compound by modifying the lead compound. This does NOT mean only that there would be a reasonable expectation of being able to *physically make* the claimed compound – the requirement also encompasses a reasonable expectation that the resultant compound would be a “successful compound” and in terms of the present application, successful for PI3 kinase inhibitors.

In view of the above and the amendments submitted in this paper, it is requested that the rejections be withdrawn.

A Notice of Allowance for all pending claims is also requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Daniel J. Pereira
Registration No. 45,518

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 03/06)